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PHYSICAL IMPAIRMENTS OF MEMBERS OF LOW-INCOME FARM FAMILIES—11,490 PERSONS IN 2,477 FARM SECURITY ADMINISTRATION BORROWER FAMILIES, 1940 [1]

I. CHARACTERISTICS OF THE EXAMINED POPULATION. II. DEFECTIVE VISION AS DETERMINED BY THE SNELLEN TEST AND OTHER CHRONIC EYE CONDITIONS

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During the past 9 years the Farm Security Administration has been engaged in the rehabilitation of low-income farmers who have insufficient collateral to obtain loans from banks. It was found in the course of the operation of this service that successful rehabilitation of these families in the field of farm operation required that attention also be given to their health and physical condition as well as to their more strictly occupational interests as farmers. To meet this need a health program has been developed under the direction of a medical officer of the Public Health Service who is loaned to the Farm Security Administration for this purpose. As a part of the activities of this program, in 1939–40, Dr. R. C. Williams, who was then in charge of the program, secured the physical examination of selected groups of the low-income farm families who were then participating in the program. The purpose of these examinations was to secure important information of value in planning the rehabilitation of these families and also to provide a source of data on the physical status of low-income farm families which would supplement the existing limited fund of information of this kind concerning the various social and economic groups that make up our population.

Available data dealing with the age-specific prevalence of physical impairments and chronic diseases among all members of selected groups of the population are limited, mainly, to two studies made from general physical examinations, namely, (1) examinations of 10,000

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male industrial workers in 10 surveyed industries (*3*); and (2) periodic examinations by the Life Extension Institute of 100,000 male and 12,000 female life insurance policyholders (*9*). Reports of the examinations of draftees and of youths employed or seeking employment on out-of-school work programs of the National Youth Administration are also available for limited age groups. Numerous other studies from which the age prevalence of specific impairments can be obtained are, of course, available.

The industrial examinations referred to (*3*) were made by medical officers of the United States Public Health Service (1914–21) in approximately 150 plants in 10 surveyed industries[2] located in cities in the Middle Atlantic, East North Central, and South Atlantic sections of the country. The examined male population was 51 percent foreign-born white, 46 percent native white, and 3 percent Negro; 69 percent of occupations were classified as skilled, 19 percent as unskilled labor, and 12 percent as executive, supervisory, or clerical.

The Life Extension Institute examinations (*9*) were of native-born white persons who applied for first check-up periodic health examination after their insurance policies were in force. Examinations at the "head" office (chiefly New York City) were made by a relatively small group of physicians working under close supervision for the purpose of uniformity of results; examinations in the field were made by some 9,000 physicians who "by reason of their much larger numbers have a diversity of training and technique and can receive very little supervision." The authors state that there was probably a tendency to miss an increasing number of impairments at ages over 60 years since the examinations were of a population able to come for health examination and therefore excluded disabled persons. An occupational classification of the examined groups shows "a disproportionately small number of individuals of the lower economic and social grades"; professional workers were overrepresented and semiskilled and unskilled laborers underrepresented as compared with the general population. Among those examined in the "field" is a group of some 4,000 farmers. Although no data are available by income it seems reasonable to conclude that, in view of the weighting of the total examined groups by the higher economic grades, the farmers examined were at least not markedly below, and might well have been above, an average economic level of farmers. Insofar as is known, no studies on the frequency of physical impairments among members of low-income farm families have been made elsewhere.

Source of the data.—During the period November 1939 through November 1940 the Farm Security Administration made physical examinations of all farmers and their families within selected areas

[2] The industries surveyed were: pottery, post office, glass, gas, foundry, steel, chemical, cement, cigar, and garment.

to whom loans had been extended. The examinations were made by local physicians; and nearby university, hospital, and teaching centers cooperated in assembling competent teams. The examining staffs included an internist, a gynecologist, a pediatrician, an eye, ear, nose, and throat specialist, a pathologist, a dentist, psychologists, nurses, and technicians. Although different professional staffs were engaged in the several areas there was considerable overlapping of professional personnel and an effort was made to obtain uniform examinations including the use of standard forms. Routine laboratory work included urinalysis, hemoglobin determination, a test for syphilis, and, in some areas, fecal examinations for intestinal parasites and blood examinations for malaria, in which the various State and county health departments cooperated. Special studies of tuberculosis and vitamin deficiency were conducted in a few selected areas.[3]

The data were collected and transferred to punch cards under the supervision of the Farm Security Administration and subsequently made available to the United States Public Health Service. The punch cards contain special fields for routine examinations, tests, or measurements of the following: height, weight, mental age, distance vision, hearing, nasal septum, tonsils and adenoids, teeth, blood pressure, appendix, perineum, uterus, hernia, varicose veins, hemorrhoids, and lost or impaired parts of the body. Other physical defects found to be present on examination are recorded on the punch card according to an illness diagnosis code.[4] Results of laboratory tests for the presence of malaria, syphilis, intestinal parasites, and hemoglobin in the blood were recorded in certain areas.[5]

The physical examination findings for this group of low-income farm families will be presented in a series of short reports; the present report will include (1) characteristics of the examined population, and (2) prevalence of defective vision and other chronic eye conditions.

I. Characteristics of the Examined Population

The 21 counties selected for physical examination of members of all Farm Security Administration borrower families residing in those

[3] X-ray films of the chests of all persons 6 years of age and over were made by a field unit of the U. S. Public Health Service in four localities—Spotsylvania County, Va., Kershaw County, S. C., Levy County, Fla., and Henderson County, Tenn.; and a determination of riboflavin deficiency in two localities, Aroostook County, Maine, and Spotsylvania County, Va.

[4] Owing to lack of time the coding of miscellaneous other defects was completed for the examined population of only 11 of the 19 areas (table 1), namely, Aroostook County, Maine; Champaign County, Ohio; Montgomery County, Ind.; Callaway County, Mo; Spotsylvania County, Va.; Avery County, N. C.; Kershaw County, S. C.; Levy County, Fla.; Henderson County, Tenn.; Pope County, Ark.; and Okfuskee County, Okla.

[5] Tests for malaria were made in the following nine areas: Hershaw County, S. C.; Worth County, Ga.; Henderson County, Tenn.; parts of Carroll, Leflore, and Humphreys Counties, Miss.; Pope County, Ark.; Okfuskee County, Okla.; Franklin Parish, La.; Panola County, Tex.; and Williamson County, Tex.

Tests for intestinal parasites were made in the above nine areas with the addition of Spotsylvania County, Va., and Avery County, N. C.

Tests for syphilis and hemoglobin were made in all areas.

counties are listed in table 2.[6] The major portion of the examined population, 71 percent, was living in the South; 29 percent resided in the Northeast and North Central sections. According to the population enumeration of 1940 (table 1), the population of the 21 selected counties was 57 percent rural farm, the individual counties varying from 34 to 89 percent. The total rural farm population of the selected counties (table 1) was almost entirely native white and Negro; in the 15 southern counties the rural farm population was 43 percent Negro. The foreign-born white population of Aroostook County, Maine (8 percent) was largely Canadian; of Howard County, Nebr. (7 percent), it was Danish, Czechoslovakian, German, and Polish; of Phillips County, Colo. (3 percent), German and Swedish; of Williamson County, Tex. (7 percent), Mexican, Czechoslovakian, Swedish, and German; of Runnels County, Tex. (2 percent), Mexican, German, and Czechoslovakian (see note 4 to table 1). The population of Okfuskee County, Okla., was 6 percent Indian.

Farms operated by Farm Security Administration borrowers are average or somewhat larger than average size except in Florida; and also in Nebraska, Colorado, and Texas where the average farm is 300 acres or more (table 1).

The percentage of farms owned by Farm Security Administration borrowers is somewhat below the average (table 1).

The Farm Security Administration has made a tabulation (*12*) of the enterprises furnishing one quarter or more of the cash income of borrower families by States. Figure 1 has been made from these data. Dairy products, particularly in the Northeast and North Central areas, and poultry and labor-off-farm in all areas are the source of one quarter or more of cash farm income in a disproportionately large percentage of borrower farms (fig. 1).

The rural rehabilitation borrower families are of a lower than average income level for farmers. Estimates made by the Bureau of Agricultural Economics, Department of Agriculture (*11*), give an average annual net income of $767 per farm in 1940. A comparable estimate of average annual net income for all rural rehabilitation farms made by the Farm Security Administration is $500 in 1940,[7] or approximately 35 percent less than that for all farms. The rural rehabilitation farmers and their families given physical examinations by the Farm Security Administration resided largely in the South which is a relatively low income area. The estimated average annual net income for 1941 of all borrowers in the States represented in the examined sample (table 2) was 17 percent lower than that for Farm Security Administration borrowers in all States.

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[6] The locality "Aroostook County, Maine" includes two sections of Aroostook County only; "Carroll, Leflore, and Humphreys Counties, Miss." includes adjacent sections of the three counties.

[7] Estimates of income are of net income of farm operators exclusive of labor-off-farm.

TABLE 1.—*Nativity of the rural farm population, size of farm and tenure of farm for total States and for counties, selected for physical examination of members of Farm Security Administration borrower families*

Geographic area	State	County	Rural farm population for county: Number of persons [1]	Percent of total county population that was rural farm [1]	Percent of rural farm population of county that was—				Average acres per farm		Percent of farms owned		Percent of rural farm population of county examined as FSA borrowers
					Native white [1]	Foreign-born white [1]	Negro [1]	Other races [1]	Total State [2]	FSA borrowers in total State [3]	Total State [2]	FSA borrowers in total State [3]	
New England	Maine	Aroostook	33,607	35.6	91.7	[4] 8.1	0.1	0.09	108	118	94	74	2.6
East North Central	Ohio	Champaign	9,688	38.4	97.7	.5	1.7	.02	94	139	74	27	4.4
	Indiana	Montgomery	9,332	34.3	99.8	.2	.0	.00	107	134	72	18	3.8
West North Central	Missouri	Callaway	11,370	49.2	93.1	.4	6.5	.00	136	163	64	37	5.9
	Nebraska	Howard	5,429	64.5	93.4	[4] 6.6	.0	.00	391	235	47	9	10.2
Mountain	Colorado	Phillips	2,602	52.6	97.3	[4] 2.7	.0	.00	613	378	63	34	15.1
South Atlantic	Virginia	Spotsylvania	6,479	65.4	68.3	.6	31.1	.00	94	136	73	57	5.1
	North Carolina	Avery	9,346	68.9	98.6	.1	1.3	.00	68	92	56	47	2.6
	South Carolina	Kershaw	19,885	60.4	41.0	.04	59.0	.00	82	84	44	29	5.4
	Georgia	Worth	17,072	79.9	52.4	.01	47.6	.00	110	122	40	33	4.4
	Florida	Levy	4,506	35.9	73.8	.2	26.0	.00	134	71	75	66	16.4
East South Central	Tennessee	Henderson	12,340	64.2	93.2	.01	6.8	.00	75	112	60	46	4.3
	Mississippi	Carroll	18,439	89.3	39.8	.02	60.2	.00	66	85	34	57	[5] .9
		Leflore	33,848	63.4	14.0	.03	85.9	.02					
		Humphreys	20,807	79.2	22.1	.02	77.9	.02					
West South Central	Arkansas	Pope	13,656	53.2	96.6	.5	2.9	.01	83	90	47	46	6.0
	Oklahoma	Okfuskee	15,871	60.4	64.8	.1	27.0	[4] 8.14	194	161	46	21	5.1
	Louisiana	Franklin	27,296	84.3	60.2	.1	39.7	.00	67	59	41	34	4.1
	Texas	Panola	17,354	77.1	51.8	.05	48.1	.00	329	152	51	29	2.8
		Williamson	22,173	53.2	81.8	[4] 6.5	11.7	.00					1.5
		Runnels	9,997	52.9	97.3	[4] 2.0	.7	.00					3.1
All counties			321,097	57.3	64.4	1.6	33.6	.42	[6] 162	[6] 137	[6] 58	[6] 39	3.6

[1] From Census of Population, 1940.
[2] From Census at Agriculture, 1940.
[3] From U. S. Dept. of Agriculture, Farm Security Administration (*12*).
[4] The foreign-born population of Aroostook Co., Maine, was 92 percent Canadian; of Howard Co., Nebr., 42 percent Danish, 17 percent Czechoslovakian, 15 percent German, 10 percent Polish, 7 percent Swedish; of Phillips Co., Colo., 41 percent German, 31 percent Swedish, 7 percent British, 7 percent Danish, 5 percent Canadian, 5 percent Russian; of Williamson Co., Tex., 36 percent Mexican, 24 percent Czechoslovakian, 15 percent Swedish, 13 percent German; of Runnels Co., Tex., 48 percent Mexican, 26 percent German, 14 percent Czechoslovakian. The population of Okfuskee Co., Okla., was 6 percent Indian.
[5] Based on total rural farm population of 3 counties.
[6] Average of 17 States.

Practically all Farm Security Administration borrower families residing in the selected areas came to the clinics for examination—2,167 white and 310 Negro families or 9,776 white persons and 1,714 Negroes (table 2). In all counties combined, this included 4 percent of the total county rural farm population (table 1). Based on families of known size, 91 percent of the members of white and 94 percent of those of Negro borrower families were examined. The average size of family

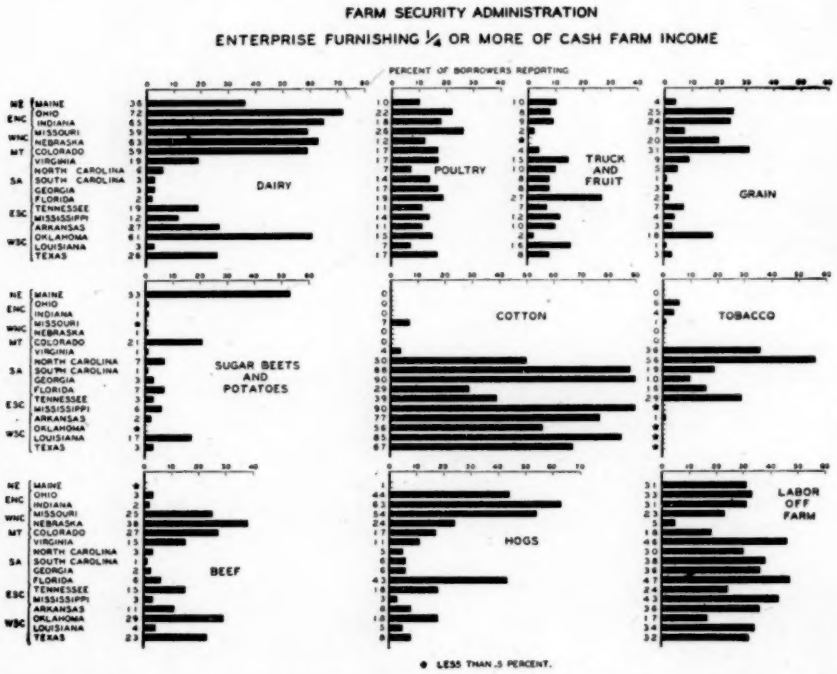

FIGURE 1.—Percentage of borrowers reporting specified enterprises as furnishing one-quarter or more of cash farm income—Farm Security Administration borrowers in 17 States, 1941 (12).

of the examined population is relatively large, 5.0 persons per family for white and 5.6 for Negro. Since relatively young heads of families were selected for Farm Security Administration loans, the mean age of the population is low, 23.5 years for whites and 22.6 for Negroes (table 2). The percentage age distribution of the white and Negro persons examined is given in table 3 and figure 2, and compared with the enumerated rural farm population (1940) of the 17 States represented and with the total population of the United States (1940). In both the white and Negro examined populations, the percentage of children under 15 years of age is relatively high, as is also the group 35 to 45 years.

TABLE 2.—*Number of persons receiving physical examination—members of Farm Security Administration borrower families in 19 localities, 1940*

Geographic area	State	County	Number of families examined		Number of persons examined		Percent examined [1]		Number of persons per family [1]		Mean age of examined population with probable error	
			White	Negro	White	Negro	White	Negro	White	Negro	White	Negro
New England	Maine	Aroostook	156		984		92.3		6.8		21.8±0.40	
East North Central	Ohio	Champaign	122		429		81.9		4.7		24.0± .58	
	Indiana	Montgomery	109		355		91.4		3.8		27.0± .67	
West North Central	Missouri	Callaway	165		675		90.8		4.5		25.2± .48	
	Nebraska	Howard	120		556		94.1		4.9		23.8± .50	
Mountain	Colorado	Phillips	100		394		92.3		4.4		24.6± .61	
South Atlantic	Virginia	Spotsylvania	39	39	172	158	94.2	93.2	5.1	4.9	25.5± .99	24.2±1.10
	North Carolina	Avery	63		239						24.8± .80	
	South Carolina	Kershaw	121	59	679	399	93.9	97.0	6.4	6.2	22.1± .44	21.2± .58
	Georgia	Worth	105	33	557	202	95.7	96.5	5.5	6.3	20.8± .46	21.5± .81
	Florida	Levy	151	32	593	145	90.0	100.0	4.4	4.1	26.8± .52	29.4±1.16
East South Central	Tennessee	Henderson	113		533		93.0		5.1		22.3± .49	
	Mississippi	Carroll, Leflore, Humphreys	87	41	421	216	90.3	92.7	5.5	5.8	22.7± .55	23.3± .79
West South Central	Arkansas	Pope	162	13	745	78	90.0	89.7	5.1	6.7	22.3± .40	20.4±1.20
	Oklahoma	Okfuskee	130	35	601	213	94.8	92.2	4.9	6.6	24.3± .49	20.6± .76
	Louisiana	Franklin	210	18	1,003	111	95.3	91.4	5.1	6.8	21.1± .34	20.5±1.10
	Texas	Panola	74	40	296	192	97.5	98.1	4.2	5.1	25.5± .70	23.8± .85
		Williamson	80		333		96.6		4.3		24.5± .67	
		Runnels	70		311		93.4		4.8		25.5± .68	
19 localities			•2,167	310	9,776	1,714	91.2	94.1	5.0	5.6	23.5± .12	22.6± .29

[1] Percent of individuals examined and number of persons per family are for examined families of known size.

TABLE 3.—*Percentage age distribution of members of Farm Security Administration borrower families, and of the total rural farm population of 17 States*

Age	Population examined by Farm Security Administration [1]												Rural farm population [2]		
	White			Negro			White			Negro					
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	Number						Percentage age distribution								
All ages	9,776	4,993	4,783	1,714	851	863	100.0	100.0	100.0	100.0	100.1	100.0	100.2	99.9	100.2
Under 5	1,229	595	634	211	95	116	12.6	11.9	13.3	12.3	11.2	13.4	11.3	10.9	11.7
5–9	1,484	771	713	288	141	147	15.2	15.4	15.0	16.8	16.6	17.0	11.5	11.2	11.8
10–14	1,633	847	786	303	162	141	16.7	17.0	16.4	17.7	19.0	16.3	11.8	11.7	11.9
15–19	1,032	537	495	237	116	121	10.6	10.8	10.3	13.8	13.6	14.0	11.4	11.4	11.5
20–24	509	206	303	91	43	48	5.2	4.1	6.3	5.3	5.1	5.6	8.7	8.8	8.5
25–29	523	246	277	63	18	45	5.3	4.9	5.8	3.7	2.1	5.2	7.3	7.2	7.3
30–34	629	288	341	71	36	35	6.4	5.8	7.1	4.1	4.2	4.1	6.2	6.1	6.3
35–39	631	308	323	84	22	62	6.5	6.2	6.8	4.9	2.6	7.2	5.8	5.5	6.1
40–44	607	313	294	90	43	47	6.2	6.3	6.1	5.3	5.1	5.4	5.2	5.0	5.3
45–49	523	264	259	90	53	37	5.3	5.3	5.4	5.3	6.2	4.3	4.9	4.8	4.9
50–54	426	259	167	71	42	29	4.4	5.2	3.5	4.1	4.9	3.4	4.3	4.4	4.1
55–59	248	147	101	50	38	12	2.5	2.9	2.1	2.9	4.5	1.4	3.6	3.9	3.4
60–64	156	112	44	32	20	12	1.6	2.2	.9	1.9	2.4	1.4	2.8	3.1	2.6
65 and over	146	100	46	33	22	11	1.5	2.0	1.0	1.9	2.6	1.3	5.4	5.9	4.8

[1] Population examined in 19 localities (table 2).
[2] Enumerated rural farm population of 17 States, 1940 (table 1).

The mean age of the examined population in separate localities (table 2) varies significantly from the average in two counties only, Montgomery County, Ind., and Levy County, Fla. In these areas there were relatively fewer children under 20 years of age. On the whole, however, the age distributions of the examined populations in the several localities are similar enough that age correction for inter-State comparisons of prevalence rates is not essential.

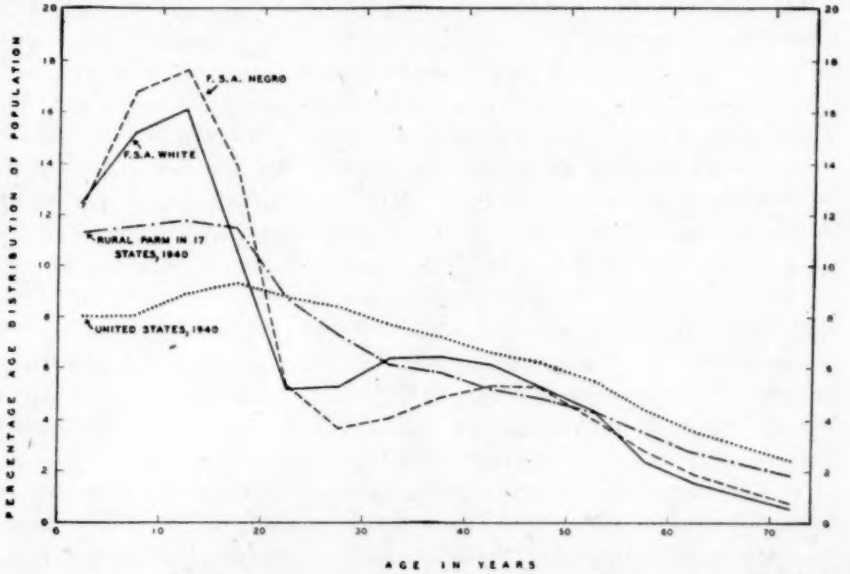

FIGURE 2.—The percentage age distribution of members of borrower families, given physical examinations by the Farm Security Administration, 1940, in a total of 19 and 9 localities for whites and Negroes, respectively; compared with the percentage age distribution of the rural farm population in a total of 17 States, and of the total population of the United States, 1940.

II. Defective Vision and Other Chronic Eye Conditions

PREVALENCE OF DEFECTIVE VISION AS DETERMINED BY THE SNELLEN TEST FOR SPECIFIC AGES

The visual acuity of 7,932 white and 1,366 Negro persons of 5 years of age and over was tested with the Snellen test chart. This test reveals practically all cases of myopia but does not discover a large percentage of the hyperopic or astigmatic eye conditions (7). The Snellen test chart consists of rows of letters of increasing size; the size of the letters being such that vision is normal when the chart can be read at the specified distance for each row of letters. Results of the test are recorded as a fraction; that is, the numerator of the fraction is the number of feet at which the chart is placed, the denominator of the fraction designates the minimum size of letter which can be read expressed as the number of feet at which vision is normal for the spe-

cified size of letter. Normal vision is defined as 20/20. Observations were recorded as of the "better" and "poorer" eye. They have been assembled into 5 groups; namely, 20/20 (normal vision) in both eyes; 20/20 (normal vision) in one eye only and 20/25 or worse in the poorer eye; 20/25 or 20/30 in the better eye and 20/25 or worse in the poorer eye; 20/40 or 20/50 in the better eye and 20/40 or worse in the poorer eye; and 20/70 or worse in both eyes.

The Snellen test is relatively objective; the results of the test vary somewhat, however, when done by different examiners and under different environmental conditions such as lighting and different subjective conditions such as the general fatigue of those examined. The observed prevalence of defective vision in different localities shows some inconsistencies when the rates specific for age and extent of defective vision are examined and, therefore, indicates some variability in the method of recording results in these data in addition to a sampling variability as measured by the probable error. Variation in the recording of Snellen test results, however, is relatively slight compared with less objective observations such as the prevalence of enlarged or diseased tonsils, for example. In these data there was also a language difficulty particularly among the French Canadians examined in Maine. A high prevalence of granular lids among the children in Arkansas made visual testing difficult in that area.

Table 4 shows the result of the Snellen test made on white persons of 5–14, 15–44, and 45 or more years of age for each of the 19 localities in which members of Farm Security Administration borrower families were examined. The range of variability in the percentage with defective vision in different localities is considerable—from 17 to 59 percent for 15–44 years of age and from 61 to 97 percent at 45 years and over. As determined by the probable error, the number of localities in which the examined population was recorded to have a consistently and significantly better or poorer vision than the average is comparatively few. A low percentage with defective vision was recorded in Callaway County, Mo., Worth County, Ga., and Carroll, Leflore, and Humphreys Counties, Miss., for all age groups and in Panola, Williamson, and Runnels Counties, Tex., for 15–44 years; a high percentage was recorded in Phillips County, Colo., and Levy County, Fla., for all age groups over 5 years, and in Pope County, Ark., and Aroostook County, Maine, for children 5–14 years. The majority of the localities, however, record an average prevalence of defective vision.

The results of the Snellen test for specific ages in all localities combined are shown in table 5 for whites and in table 6 for Negroes and whites in the areas in which Negro families were examined. Figure 3 is an over-all representation of the cumulative prevalence of poor, moderate, slightly defective, and normal vision in specific age

TABLE 4.—*Percentage of white persons in three age groups with the specified vision as determined by the Snellen test—members of Farm Security Administration borrower families in 19 localities, 1940*

Geographic area	State	County	5–14 years			15–44 years			45 years and over		
			Number examined for vision	20/25 or worse in either eye [1] (percent)	20/40 or worse in better eye (percent)	Number examined for vision	20/25 or worse in either eye [1] (percent)	20/40 or worse in better eye (percent)	Number examined for vision	20/25 or worse in either eye [1] (percent)	20/40 or worse in better eye (percent)
New England	Maine	Aroostook	297	46.1	6.1	260	43.8	5.8	109	78.0	23.9
East North Central	Ohio	Champaign	103	29.1	4.9	182	31.3	7.1	65	67.7	32.3
	Indiana	Montgomery	83	37.3	8.4	147	42.9	8.2	75	82.7	40.0
West North Central	Missouri	Callaway	196	8.7	1.0	235	17.4	1.3	114	60.5	21.9
	Nebraska	Howard	184	27.7	6.5	217	38.7	5.5	82	81.7	30.5
Mountain	Colorado	Phillips	96	46.9	10.4	164	59.1	17.1	63	87.3	47.6
South Atlantic	Virginia	Spotsylvania	53	22.6	3.8	56	25 0	1.8	26	76.9	38.5
	North Carolina	Avery	61	23.0	0	99	41.4	9.1	38	84.2	52.6
	South Carolina	Kershaw	221	28.4	4.0	267	40.8	6.4	92	83.0	46.8
	Georgia	Worth	179	9.5	3.4	215	24.7	6.5	60	61.7	35.0
	Florida	Levy	86	45.3	5.8	255	57.6	7.1	120	96.7	56.7
East South Central	Tennessee	Henderson	120	30.0	5.0	226	41.6	5.3	63	88.9	57.1
	Mississippi	Carroll, Leflore, Humphreys	132	15.9	1.5	163	22.7	3.7	55	61.8	23.6
West South Central	Arkansas	Pope	205	40.0	5.9	317	40.4	6.6	83	75.9	38.6
	Oklahoma	Okfuskee	140	19.3	.7	241	32.8	6.2	107	76.6	39.3
	Louisiana	Franklin	293	19.8	3.8	396	26.8	5.8	107	76.6	37.4
	Texas	Panola	77	19.5	2.6	127	26.0	1.6	47	83.0	23.4
		Williamson	80	12.5	1.3	125	18.4	4.0	60	76.7	40.0
		Runnels	79	21.5	2.5	125	24.8	4.0	62	82.3	32.3
19 localities			2,685	26.9	4.2	3,819	35.4	6.1	1,428	78.2	37.6

[1] The range of the probable error of the percentage with defective vision (20/25 or worse in either eye) is from 1.4 to 3.9 percent for the age group 5–14 years; from 1.5 to 3.9 percent for the age group 15–44 years; and from 1.1 to 5.6 percent for the age group 45 years and over.

TABLE 5.—*Percentage of white persons in specific age groups with the specified vision as determined by the Snellen test—members of Farm Security Administration borrower families in a total of 19 localities, 1940*

Age	Number examined for vision	20/20 or better in both eyes (percent)	20/20 or better in one eye only (percent)	20/25 or 20/30 in better eye (percent)	20/40 or 20/50 in better eye (percent)	20/70 or worse in better eye (percent)
	Both sexes					
5 years and over	7,932	59.7	11.7	17.4	5.9	5.3
5–9	1,101	70.6	8.9	16.3	3.0	1.2
10–14	1,584	74.6	9.1	12.1	2.5	1.7
15–19	1,008	73.0	10.9	11.6	2.6	1.9
20–24	494	68.0	13.2	14.0	2.8	2.0
25–29	510	68.8	13.3	13.9	2.5	1.4
30–34	615	64.2	13.3	15.9	3.6	2.9
35–39	615	58.2	14.0	19.3	4.4	4.1
40–44	577	50.6	14.9	25.6	4.9	4.0
45–49	501	32.9	18.0	27.5	10.0	11.6
50–54	412	21.6	12.1	28.2	19.7	18.4
55–59	234	16.7	12.0	23.1	24.8	23.5
60–64	150	7.3	10.7	30.7	23.3	28.0
65 and over	131	5.3	6.1	25.2	29.8	33.6
	Male					
5 years and over	4,100	63.2	11.9	15.8	5.3	3.8
5–9	567	71.4	9.2	15.5	2.8	1.1
10–14	819	77.0	8.8	10.7	1.6	1.8
15–19	530	78.3	10.2	7.9	2.1	1.5
20–24	199	73.9	12.1	10.1	2.5	1.5
25–29	242	75.6	13.2	8.7	1.2	1.2
30–34	281	70.1	12.1	12.8	1.8	3.2
35–39	301	67.8	13.0	13.3	2.7	3.3
40–44	302	59.3	13.6	20.9	4.3	2.0
45–49	257	40.5	23.3	24.1	7.0	5.1
50–54	255	31.0	14.9	30.6	16.5	7.1
55–59	144	22.2	14.6	29.2	22.9	11.1
60–64	110	8.2	12.7	38.2	19.1	21.8
65 and over	93	7.5	6.5	28.0	30.1	28.0
	Female					
5 years and over	3,832	56.0	11.6	19.1	6.5	6.8
5–9	534	69.7	8.6	17.2	3.2	1.3
10–14	765	72.0	9.4	13.5	3.5	1.6
15–19	478	67.2	11.7	15.7	3.1	2.3
20–24	295	64.1	13.9	16.6	3.1	2.4
25–29	268	62.7	13.4	18.7	3.7	1.5
30–34	334	59.3	14.4	18.6	5.1	2.7
35–39	314	49.0	15.0	25.2	6.1	4.8
40–44	275	41.1	16.4	30.9	5.5	6.2
45–49	244	25.0	12.3	31.1	13.1	18.4
50–54	157	6.4	7.6	24.2	24.8	36.9
55–59	90	7.8	7.8	13.3	27.8	43.3
60–64	40	5.0	5.0	10.0	35.0	45.0
65 and over	38	.....	5.2	18.4	28.9	47.4

groups of the white examined population. From 30 to 70 years of age the percentage with defective vision increases from approximately 30 to 95 percent; from 45 to 70 years of age the percentage with moderate and markedly defective vision (20/40 or worse in better eye) increases from approximately 10 to 60 percent.

The data of table 7 are taken from studies of defective vision among other population groups and are reproduced here for comparison with low-income farm families. The age specific prevalence of defective

vision from various sources is plotted on semi-logarithmic paper in figure 4. Although rough comparisons can be made in the actual results of the Snellen test conducted by different groups of examiners the relative age prevalence furnishes more valid comparisons.

The general agreement among the various data shown in figure 4 is striking. Both the Farm Security Administration data and schoolboys examined in eastern counties of the United States (*5*) show a decline in the percentage with defective vision as indicated by the Snellen

TABLE 6.—*Percentage of Negro and white persons in specific age groups with the specified vision as determined by the Snellen test—members of Farm Security Administration borrower families in a total of nine localities,* [1] *1940*

Age	Negro					White				
	Number examined for vision	20/20 or better in both eyes (percent)	20/20, 20/25 or 20/30 in better eye (percent)	20/40 or worse in better eye (percent)	Defective vision: 20/25 or worse in either eye (percent)	Number examined for vision	20/20 or better in both eyes (percent)	20/20, 20/25 or 20/30 in better eye (percent)	20/40 or worse in better eye (percent)	Defective vision: 20/25 or worse in either eye (percent)
	Both sexes									
5 years and over	1,366	74.7	17.8	7.6	25.3	4,122	61.4	27.8	10.9	38.6
5–9	190	87.9	9.4	2.7	12.1	554	75.5	21.0	3.6	24.5
10–14	292	91.1	8.6	.3	8.9	832	75.8	20.6	3.6	24.2
15–19	232	82.3	15.6	2.2	17.7	559	73.5	22.3	4.1	26.5
20–24	89	78.7	18.0	3.4	21.3	278	70.9	24.1	5.0	29.1
25–34	130	83.1	14.7	2.3	16.9	591	66.5	28.8	4.7	33.5
35–44	171	71.9	22.2	5.9	28.1	611	54.3	37.2	8.5	45.7
45–54	153	45.1	32.7	22.2	54.9	450	26.9	40.2	32.9	73.1
55–64	81	27.2	40.7	32.1	72.8	188	12.2	37.7	50.0	87.8
65 and over	28	14.3	28.5	57.2	85.7	59	5.1	28.8	66.1	94.9
	Male									
5 years and over	683	74.2	18.6	7.1	25.8	2,133	63.5	26.6	9.9	36.5
5–9	87	86.2	11.4	2.3	13.8	280	77.1	19.3	3.6	22.9
10–14	153	90.2	9.8	.....	9.8	437	78.3	18.1	3.7	21.7
15–19	113	81.4	16.8	1.8	18.6	287	78.4	17.8	3.8	21.6
20–24	44	77.3	18.1	4.5	22.7	109	69.7	25.7	4.6	30.3
25–34	54	85.2	14.9	.....	14.8	283	69.6	26.5	3.9	30.4
35–44	64	78.1	18.8	3.2	21.9	304	61.2	31.6	7.2	38.8
45–54	91	56.0	26.4	17.6	44.0	263	34.2	43.7	22.0	65.8
55–64	57	31.6	40.3	28.0	68.4	126	15.9	45.2	38.9	84.1
65 and over	20	15.0	40.0	45.0	85.0	44	6.8	27.2	65.9	93.2
	Female									
5 years and over	683	75.1	17.0	7.9	24.9	1,989	59.0	29.0	11.9	41.0
5–9	103	89.3	7.8	2.9	10.7	274	73.7	22.6	3.7	26.3
10–14	139	92.1	7.2	.7	7.9	395	73.2	23.3	3.6	26.8
15–19	119	83.2	14.3	2.5	16.8	272	68.4	27.2	4.4	31.6
20–24	45	80.0	17.8	2.2	20.0	169	71.6	23.1	5.4	28.4
25–34	76	81.6	14.5	3.9	18.4	308	63.6	30.8	5.5	36.4
35–44	107	68.2	24.3	7.4	31.8	307	47.6	42.6	9.8	52.4
45–54	62	29.0	41.9	29.0	71.0	187	16.6	35.3	48.1	83.4
55–64	24	16.7	41.7	41.6	83.3	62	4.8	22.5	72.6	95.2
65 and over	8	12.5	.....	87.5	87.5	15	.....	33.3	66.7	100.0

[1] The localities included are those for which the number of persons examined is shown for Negroes in table 2.

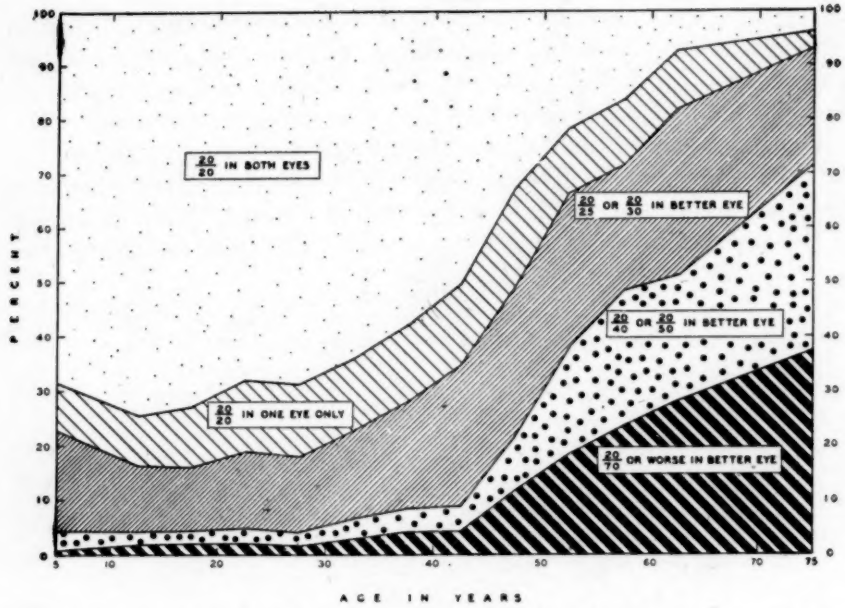

FIGURE 3.—The cumulated prevalence of specified degrees of defective vision as determined by the Snellen test for white persons in specific age groups—members of Farm Security Administration borrower families in 19 localities, 1940.

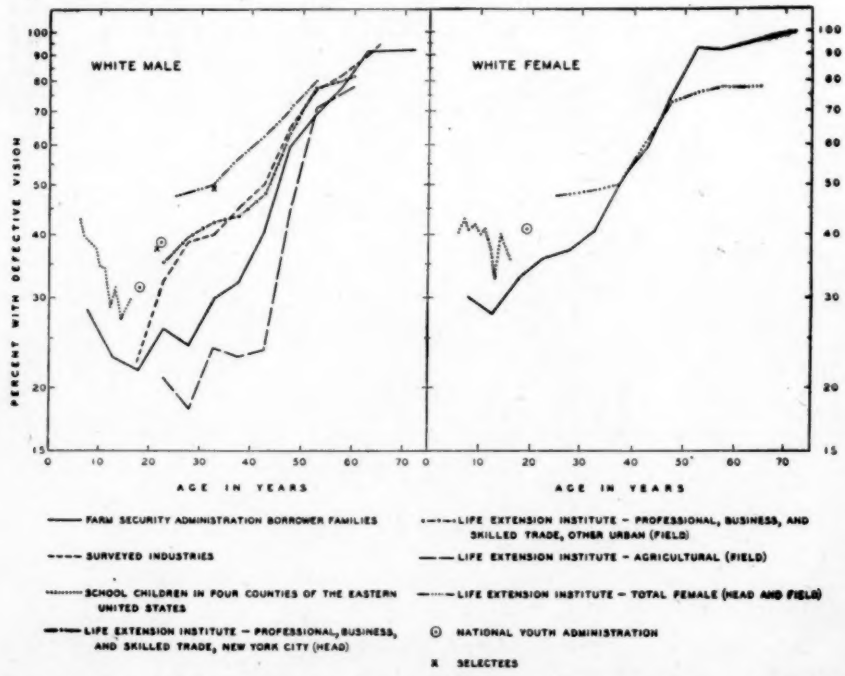

FIGURE 4.—Relative age prevalence of defective vision as determined by the Snellen test—members of Farm Security Administration borrower white families in 19 localities, 1940, compared with other available data. Poorer than 20/20 in one or both eyes is defined as defective vision.

test at ages under 20 years; females show a decline at ages under 15 years. This observation is in agreement with the fact that the anatomical development of the eye among males is not complete until about 20 years of age (*5*). After 20 years of age the percentage of males with defective vision increases in each successive age group; for industrial workers (*3*, *10*) the increase is most rapid between 20 and 30 years of age, whereas for agricultural workers (*10*) the increase is most rapid from 45 to 55 years of age. From 20 to 50 years of age defective vision is more frequent among industrial workers than among farmers; after 50 years of age, however, there is little difference in the occurrence of defective vision among industrial and agricultural workers.

TABLE 7.—*Percentage of white persons in specific age groups with defective vision as determined by the Snellen test—members of Farm Security Administration borrower families, 1940, and comparable data*

Age	Farm Security Administration borrower families		Surveyed industries [1]	School children in 4 counties of the eastern U. S.		Life Extension Institute					National Youth Administration [7]		Selectees [8]
						Male							
							Professional, business, and skilled trade		Agricultural (field) [3]	Total female [6]			
	Male	Female	Male	Male [2]	Female [3]	Total [4]	N.Y. city (head) [5]	Other cities (field) [5]			Male	Female	Male
	Percent with defective vision [9]												
5–9	28.6	30.3	------	39.8	41.6	------	------	------	------	------	------	------	------
10–14	23.0	28.0	------	31.4	38.5	------	------	------	------	------	------	------	------
15–19	21.7	32.8	22.6	30.1	35.7	------	------	------	------	------	31.4	40.9	------
20–24	26.1	35.9	32.4	------	------	36.2	47.7	35.5	21.0	47.6	38.6		37.6
25–29	24.4	37.3	38.7	------	------	39.5		39.4	18.2		------	------	------
30–34	29.9	40.7	39.9	------	------	42.0	50.2	42.6	23.9	48.9	------	------	49.4
35–39	32.2	51.0	45.1	------	------	43.8	56.9	43.7	23.2	50.8	------	------	------
40–44	40.7	58.9	50.6	------	------	48.6	62.6	48.6	23.8	60.7	------	------	------
45–49	59.5	75.0	65.3	------	------	64.5		63.9	44.7	72.9	------	------	------
50–54	69.0	93.6	77.5	------	------	77.2		78.0	71.4	75.7	------	------	------
55–59	77.8	92.2	82.2	------	------	81.7	80.0			77.9	------	------	------
60–64	91.8	95.0	94.6	------	------	82.9		82.3	78.2	77.7	------	------	------
65 and over	92.5	100.0		------	------	83.3					------	------	------

[1] From Britten and Thompson (*3*), 1914–21. The Snellen test data are for 8 industries: pottery, post office, glass, gas, foundry, steel, cement, and cigar.
[2] From Collins and Britten (*5*), 1915–17. The percentage with defective vision is given for single years of age. The percentage for the age group 15–19 years in this table is for boys 15–17 years of age.
[3] From Collins (*4*) 1915–17. The percentage with defective vision is given for single years of age. The percentage for the age group 15–19 years in this table is for girls 15–16 years of age.
[4] From Sydenstricker and Britten (*9*), 1922–25.
[5] From Sydenstricker and Britten (*10*), 1922–25.
[6] From Britten (*1*), 1922–25.
[7] From McDowell and Meroney (*8*), 1941. The percentages for males are for the age groups 16–20 and 21–24 years; for females 16–24 years.
[8] From Karpinos (*6*), 1943. The percentages are for males, 18–24 and 25–39 years of age.
[9] Poorer than 20/20 in one or both eyes is defined as defective vision.

Considering the two agricultural groups examined, defective vision is more frequent among the Farm Security Administration borrowers at every age group under 50 years than among the farmers examined

by the Life Extension Institute; from 20 to 50 years of age the percentages for the Farm Security Administration farmers are, on the average, approximately 30 percent higher. These two sets of agricultural data differ in several respects. The Farm Security Administration families are of a low income group, whereas the agricultural workers examined by the Life Extension Institute are probably of a better-than-average income class. With respect to blindness as associated with income class the National Health Survey (*2*) shows a definite relationship between income and the prevalence of blindness in either one or both eyes for both males and females; in these data there is a marked increase in blindness as family income decreases, exclusive of those families receiving relief. Although this is probably due to greater accident and disease hazards among lower income groups, the reverse effect probably also operates, blindness causing a decline in income. With respect to the general standards of health of the two farm groups, it was stated earlier that the Life Extension Institute examinations were of persons who had passed a medical examination for life insurance and who had applied for a first check-up health examination. This would largely exclude definitely disabled persons. On the other hand, the Farm Security Administration data pertain to farmers and their families who have applied for rehabilitation loans. While illness may be wholly or in part responsible for a farmer's application for a loan, it seems unlikely that defects of vision alone could be a major cause of lowered farm income although defective vision might presumably be associated with other and more disabling kinds of defects.

Moreover, it is obvious that variations in examining standards lead to different recorded results. In the Farm Security Administration examinations 20/25 or worse in either eye is defined as a defect of vision. In the "10 surveyed industries" data defective vision is defined as 20/30 or worse in either eye. No subdivision of the total defective vision into slight and marked degree is made in the Life Extension Institute data and therefore it is impossible to say whether defective vision, in these data, is defined as 20/25 or worse or 20/30 or worse in either eye. Table 7 shows a comparison of the prevalence of defective vision for the group of professional, business, and skilled trade examined by the Life Extension Institute in New York City (head office) and in other urban areas (field offices). The authors' explanation of the high prevalence shown for those examined at the head office is the more careful and consistent examinations made there. Examinations of the agricultural group were made in field offices. Moreover, the recorded prevalence of defective vision for Farm Security Administration clients in separate States (table 4) showed variability in recorded results in spite of the relatively objective nature of the Snellen test. In view of the uncontrollable factors involved, therefore, it is difficult to make more than

rough comparisons between the actual prevalence rates of defective vision as obtained by different surveys upon diverse groups of the population.

Females among the Farm Security Administration borrower families (fig. 4) show a smaller percentage with defective vision than females of the Life Extension Institute data at ages 20 to 34 and identical percentages for ages 35 to 50 years.

Defective vision among males and females for specific age groups is compared in figure 5. Defective vision increases after 20 years for males and after 15 years for females. White females have more

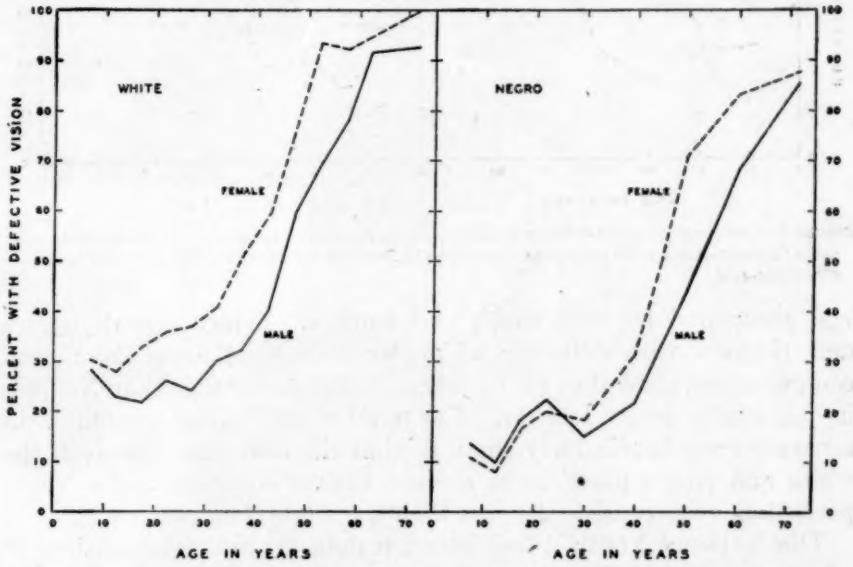

FIGURE 5.—Prevalence of defective vision as determined by the Snellen test among white and Negro males and females in specific age groups—members of Farm Security Administration borrower families in 19 and 9 localities, respectively, 1940.

defective vision than white males. The percentage difference between the curves of defective vision for white males and females is greatest at ages 15–44 years; at 60 years of age and over there is a slight difference only. Among the Negro population more females than males have defective vision after 25 years of age. Under 25 years and also at 65 years and over there is very little difference between the percentages for males and females. The observation that there is a higher percentage of defective vision among females than males is borne out by the Life Extension Institute data (table 7).

A comparison of the percentages of whites and Negroes with defective vision is shown in figure 6; the data for whites are based on those States in which Negroes were examined. Defective vision is less frequent among Negroes than whites in these data for every

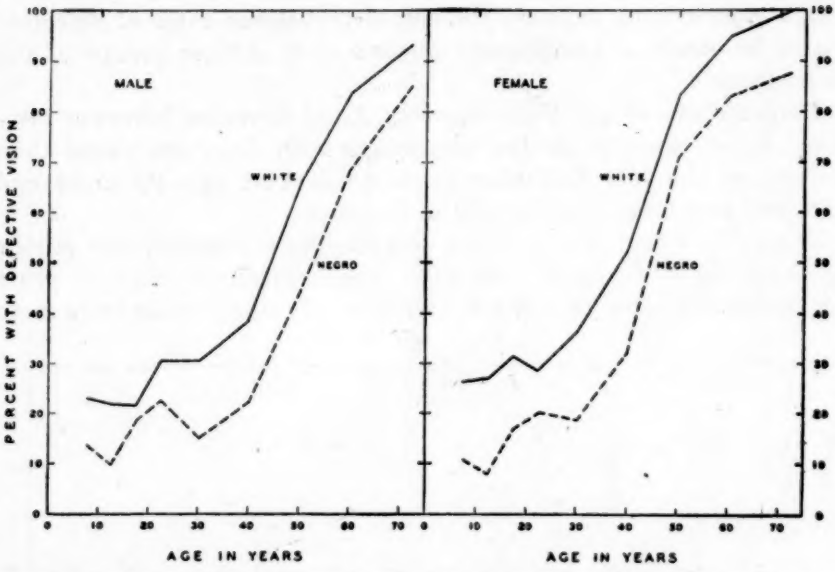

FIGURE 6.—Prevalence of defective vision as determined by the Snellen test among whites and Negroes for males and females in specific age groups—members of Farm Security Administration borrower families in 9 localities, 1940.

age group and for both males and females. Percentages of whites and Negroes with defective vision for individual areas have been computed and show that whites have a higher percentage than Negroes in practically every locality. The number of Negroes examined in separate areas is relatively small so that the differences between the white and Negro percentages are not always significant; the Negro percentages are consistently less than the white, however.

The National Youth Administration data (*8*) and examinations of selectees made in February 1943 (*6*) show more defects of vision among whites than Negroes as follows:

Race	National Youth Administration		Selectees	
	Male: 16–24 years	Female: 16–24 years	Male: 18–24 years	Male: 25–39 years
	Percent with defective vision (20/25 or worse in either eye)			
White	32.9	40.9	37.6	49.4
Negro	29.3	36.7	31.0	40.6

These data, therefore, corroborate the observation that defective vision is less frequent among Negroes than whites. Both Negroes and whites were examined in the same Farm Security Administration clinics and by the same examining staffs. The economic status of Negroes and whites examined could not have been widely different,

and, therefore, the data seem to be favorable for a racial comparison. Since, however, a larger proportion of Negro than white agricultural workers are in all likelihood farm laborers rather than farm operators and since loans were made by the Farm Security Administration to farm operators only, it is likely that the Negroes examined represent a better social class among Negro farmers than the whites among all white farmers.

TABLE 8.—*Percentage of white persons wearing glasses* [1] *among (a) members of Farm Security Administration borrower families in a total of 19 localities, 1940; (b) school children in 4 counties in the eastern United States; and (c) persons given medical examination by the Life Extension Institute*

Color, sex, and source	Percentage of persons examined wearing glasses			Percentage of persons with defective vision wearing glasses			Percentage of persons with vision of 20/40 or worse fh better eye wearing glasses		
	5–19	20–39	40 and over	5–19	20–39	40 and over	5–19	20–39	40 and over
	Percent								
White male:									
Farm Security Administration	1.6	4.0	8.9	5.8	10.3	12.8	14.5	28.3	24.4
School children [2]	1.6	.....	.....	4.4	.....	.....	9.0	.....	.....
Life Extension Institute: total [3]	.....	20.9	39.0	.....	50.6	60.6	.....	.....	.....
Professional, business, and skilled trade:									
New York City (head) [4]	.....	21.8	33.0	.....	42.7	45.0	.....	.....	.....
Other urban (field) [4]	.....	22.4	41.4	.....	54.1	64.6	.....	.....	.....
Agricultural (field) [4]	.....	11.2	32.0	.....	50.5	62.4	.....	.....	.....
White female:									
Farm Security Administration	2.7	9.2	26.7	7.9	17.9	32.9	23.6	30.0	50.5
School children [2]	2.2	.....	.....	5.6	.....	.....	13.0	.....	.....
Life Extension Institute: total [5]	.....	26.5	39.2	.....	54.0	56.7	.....	.....	.....

[1] The percentage of persons wearing glasses includes persons wearing glasses for any visual defect.
[2] From Collins (*4*), 1915–17. School children, 6–16 years of age, in Spartanburg, S. C., and nearby villages, Frederick County, Md., New Castle County, Del., and Nassau County, N. Y.
[3] From Sydenstricker and Britten (*9*), 1922–25.
[4] From Sydenstricker and Britten (*10*), 1922–25.
[5] From Britten (*1*), 1922–25.

The percentage of persons wearing glasses for any defect of vision among those examined by the Farm Security Administration is small compared with the percentage with defective vision. At 40 years and over, 9 percent of males and 27 percent of females examined were wearing glasses; 13 percent of males and 33 percent of females with any degree of defective vision were wearing glasses; and 24 percent of males and 51 percent of females with markedly defective vision (20/40 or worse in better eye) were wearing glasses for some defect of vision (table 8). For children 5–19 years of age the percentage wearing glasses is slightly more than that for school children examined in four rural localities of the eastern United States (1915–17). Among persons examined by the Life Extension Institute, however, glasses were worn much more frequently than among the low-income farm families, particularly among males.

PREVALENCE OF OTHER EYE DEFECTS AND CHRONIC DISEASES

The occurrence of other eye defects and chronic diseases found on physical examination has been coded and tabulated in these data for only 11 of the 19 localities, including 5 localities where Negroes were examined. Table 9 gives the recorded prevalence of specific eye conditions for white and Negro males and females per 100 persons examined for any defect. Among the defects included in table 9 the rate for pterygium only is significantly higher for males than females (white); other defects show no significant difference between the rates for the two sexes. Negroes have significantly higher rates than whites for cataract[8] and pterygium; whites have significantly higher rates for strabismus and trachoma.

TABLE 9.—*Prevalence of specific eye diseases among white and Negro males and females—members of Farm Security Administration borrower families, 1940*

Race and sex	Number of persons examined	Glaucoma	Cataract	Strabismus	Trachoma and suspected trachoma[1]	Inflammatory diseases of eye and eyelid	Pterygium	Blind in one eye	Blind in both eyes
		Percent							
White male (11 localities) [2]	3,000	0.13	1.77	2.87	1.33	0.63	2.87	0.50	0.03
White female (11 localities) [2]	2,905	.10	1.20	2.48	1.03	.86	1.34	.34	.07
Negro male (5 localities) [3]	494	-------	3.64	.61	.20	.61	6.68	1.01	-------
Negro female (5 localities) [3]	499	-------	3.01	.60	-------	.20	6.41	.40	.40

[1] The total of 70 cases includes 14 diagnosed as definite trachoma; the remaining 56 cases were diagnosed as suspected trachoma recommended for observation.
[2] The 11 localities are: Aroostook County, Maine; Champaign County, Ohio; Montgomery County, Ind.; Callaway County, Mo.; Spotsylvania County, Va.; Avery County, N. C.; Kershaw County, S. C.; Levy County, Fla.; Henderson County, Tenn.; Pope County, Ark.; and Okfuskee County, Okla.
[3] The 5 localities are: Spotsylvania County, Va.; Kershaw County, S. C.; Levy County, Fla.; Pope County, Ark.; and Okfuskee County, Okla.

The high prevalence of cataract in Florida and of trachoma and suspected trachoma in Arkansas is outstanding. Among 67 white cases reported in Pope County, Ark., 13 were diagnosed as trachoma and treatment recommended; 54 were recorded as suspected trachoma recommended for observation. In this connection, Veldee (*14*) records a high prevalence of folliculosis (30 percent of persons under 20 years of age) in Pinellas County, Fla. He states that folliculosis may be very widespread among children of school ages and is frequently diagnosed as trachoma; the disease is mild and runs a brief course compared with trachoma, disappearing spontaneously.

Table 10 gives the age-specific prevalence of cataract, strabismus, trachoma and suspected trachoma, and pterygium as found on physical examination. The highest prevalence of "trachoma and suspected trachoma" occurs at 5–14 years of age; of the 13 cases diagnosed as

[8] Rates of cataract for Levy County, Fla., for both sexes are: white, 12.1, and Negro, 20.7 percent.

definite trachoma in Pope County, Ark., 7 occurred between the ages of 5 and 14 years. Veldee found the age of maximum prevalence of folliculosis to be 5–6 years of age with a rapid decline thereafter in contrast to trachoma which persists into adult life.

TABLE 10.—*Prevalence of certain eye diseases among white persons in specific age groups—members of Farm Security Administration borrower families, 1940*

Age	Number of persons examined in—			Cataract (Levy County Fla.) [2]	Strabismus (11 localities) [1]	Trachoma and suspected trachoma [3] (Pope County, Ark.)	Pterygium (11 localities) [1]
	11 localities [1]	Florida [2]	Arkansas [3]	Percent			
All ages	5,905	593	745	12.1	2.7	9.0	2.1
Under 5	733	71	88	----	1.0	5.7	----
5–14	1,837	136	246	----	2.9	14.2	.4
15–24	991	112	131	.9	2.7	9.9	.6
25–34	663	75	87	----	2.4	5.7	1.1
35–44	726	73	107	8.2	4.3	3.7	4.5
45–54	581	68	58	29.4	2.9	5.2	6.7
55–64	268	42	23	76.2	1.9	8.7	6.7
65 and over	106	16	5	81.3	1.9	----	13.2

[1] The 11 localities are as given in table 9, note 2.
[2] Of the total 88 cases of cataract 72, or 82 percent, occurred in Levy County, Fla.
[3] Of the total 70 cases of trachoma 67, or 93 percent, occurred in Pope County, Ark. The total of 67 cases includes 13 diagnosed as definite trachoma; the remaining 54 cases were diagnosed as suspected trachoma recommended for observation. The ages of the reported trachoma cases are: 2, under 5; 7, 5–14; 1, 15–24; 1, 25–34; and 2, 35–44.

SUMMARY

In connection with a rehabilitation program for borrower families the Farm Security Administration organized clinics and conducted general physical examinations of practically all members of borrower families in 19 selected localities from November 1939 through November 1940. The examinations were made by a staff of physicians and technicians. The examined population was almost entirely native white and Negro residing in 11 Southern States and 6 Northern or intermediate States. The families represent a low income farm population of the United States.

Curves of the age prevalence of defective vision as determined by the Snellen test are presented for this selected group and compared with other available data. The relative age prevalence of defective vision among rural rehabilitation farmers agrees with that of farmers examined by the Life Extension Institute, and differs from that of urban groups examined in a less rapid rate of increase in young adult ages and a more rapid rate of increase between 40 and 50 years of age. With respect to the actual value of recorded prevalence rates, the Farm Security Administration borrower families have less defective vision as determined by the Snellen test than available examined urban groups especially between the ages of 20 and 45 years; they also com-

pare somewhat unfavorably with another examined agricultural group but it is impossible to say how much of this difference might be due to differences in group selection and examining procedure.

Sex and color comparisons show that females have a higher percentage of defective vision than males for every age group; Negroes in these data have less defective vision than whites for all age groups.

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PREVALENCE OF DISEASE

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring

UNITED STATES

REPORTS FROM STATES FOR WEEK ENDED SEPTEMBER 2, 1944

Summary

The increase during the week in the incidence of poliomyelitis is less than that for either of the 2 preceding weeks. A total of 1,683 cases was reported, as compared with 1,529 and 1,254 for the preceding week and the next earlier week, respectively, and 1,370 for the corresponding week of 1931, which was the largest number reported for any week in prior years for which weekly records are available (i. e., since 1927).

The largest numbers, aggregating 1,423 cases, or approximately 85 percent of the total, were reported in the Middle Atlantic, East North Central, and South Atlantic areas. Sixteen States (6 showing decreases) reported 20 or more cases each, as follows (last week's figures in parentheses): *Increases*—Connecticut 20 (19), New York 666 (581), New Jersey 67 (36), Pennsylvania 162 (139), Ohio 105 (97), Indiana 27 (16), Michigan 120 (94), Wisconsin 32 (26), Maryland 47 (40), Virginia 65 (63); *decreases*—Massachusetts 35 (43), Illinois 37 (38), Minnesota 40 (57), District of Columbia 22 (27), North Carolina 42 (46), Kentucky 34 (38).

The total number of cases reported for the first 35 weeks of the year, ended September 2, is 9,472, as compared with 5,886 for the same period last year and a 5-year (1939–43) median of 3,301. In 14 of the past 17 years the peak of weekly incidence of poliomyelitis was reached earlier than September 20.

Tne number of cases of meningococcus meningitis reported for the week, 122, although more than 4 times the 5-year median of 29, is less than the number reported last week or for the corresponding week last year, 159 and 151, respectively. States reporting the largest numbers are New York (19), California (12), Pennsylvania (11), and Michigan (9).

Currently reported cases of diphtheria, smallpox, typhoid fever,and whooping cough are below both the reports for last week and the 5-year medians. The total of scarlet fever is below the 5-year median. While the figures for influenza and measles are less than for the preceding week, they are slightly above the medians.

A total of 7,591 deaths was recorded in 92 large cities of the United States, as compared with 7,446 last week and a 3-year (1941–43) average of 7,736. The total for the year to date is 318,961, as compared with 325,413 for the same period last year.

Telegraphic morbidity reports from State health officers for the week ended Sept. 2, 1944, and comparison with corresponding week of 1943 and 5-year median

In these tables a zero indicates a definite report, while leaders imply that, although none was reported, cases may have occurred.

Division and State	Diphtheria			Influenza			Measles			Meningitis, meningococcus		
	Week ended—		Median 1939–43	Week ended—		Median 1939–43	Week ended—		Median 1939–43	Week ended—		Median 1939–43
	Sept. 2, 1944	Sept. 4, 1943		Sept. 2, 1944	Sept. 4, 1943		Sept. 2, 1944	Sept. 4, 1943		Sept. 2, 1944	Sept. 4, 1943	
NEW ENGLAND												
Maine	0	0	0	-------	0	-------	9	11	11	0	2	0
New Hampshire	0	0	0	-------	0	-------	0	0	0	1	0	0
Vermont	0	1	0	-------	0	-------	2	1	3	0	0	0
Massachusetts	4	0	1	-------	0	-------	26	24	38	4	4	1
Rhode Island	2	0	0	-------	0	-------	1	8	5	1	3	0
Connecticut	1	1	0	2	0	-------	11	9	11	5	4	0
MIDDLE ATLANTIC												
New York	6	5	8	[1] 1	[1] 2	[1] 2	50	100	57	19	19	2
New Jersey	0	2	2	1	2	2	12	65	20	8	1	1
Pennsylvania	8	3	4	-------	0	-------	21	30	39	11	14	2
EAST NORTH CENTRAL												
Ohio	2	5	5	5	0	4	8	27	24	8	8	1
Indiana	8	8	8	-------	12	4	2	1	1	0	1	1
Illinois	4	5	10	1	3	3	7	22	10	6	12	2
Michigan [2]	5	6	6	1	1	1	4	86	16	9	13	1
Wisconsin	2	2	0	2	11	11	113	93	43	2	1	1
WEST NORTH CENTRAL												
Minnesota	0	3	2	-------	0	1	3	16	5	1	2	0
Iowa	2	5	2	-------	0	-------	3	2	10	0	1	0
Missouri	1	0	3	-------	1	-------	4	9	4	5	5	2
North Dakota	3	1	1	5	13	1	3	13	3	3	1	0
South Dakota	2	2	2	-------	0	-------	0	7	3	0	0	0
Nebraska	2	4	0	-------	0	-------	1	0	2	1	0	0
Kansas	5	2	3	-------	0	-------	4	5	8	0	1	0
SOUTH ATLANTIC												
Delaware	0	1	0	-------	0	-------	0	0	0	1	1	0
Maryland [2]	5	1	1	-------	1	2	9	17	7	0	0	1
District of Columbia	0	0	1	-------	0	-------	1	3	3	0	2	0
Virginia	6	5	5	24	30	30	5	7	7	1	0	1
West Virginia	2	5	5	1	0	1	2	9	3	1	2	2
North Carolina	3	27	32	5	0	-------	12	10	10	5	4	1
South Carolina	11	9	9	64	152	90	5	4	4	0	1	1
Georgia	12	0	13	52	5	18	13	7	6	0	0	0
Florida	7	6	3	1	11	4	72	0	4	2	4	0
EAST SOUTH CENTRAL												
Kentucky	9	7	7	1	2	2	2	10	8	5	3	1
Tennessee	5	3	6	6	2	4	1	8	6	1	1	1
Alabama	6	6	12	12	16	6	3	5	16	2	5	1
Mississippi [2]	10	12	12	-------	0	-------	-------	-------	-------	1	0	0
WEST SOUTH CENTRAL												
Arkansas	4	0	7	10	1	2	6	6	4	1	1	0
Louisiana	4	2	2	-------	1	1	0	0	1	1	2	1
Oklahoma	5	1	5	7	11	5	10	11	2	0	2	0
Texas	15	18	22	216	226	108	28	46	29	2	6	2
MOUNTAIN												
Montana	15	0	2	-------	0	-------	0	24	10	0	0	0
Idaho	0	0	0	-------	0	-------	0	1	1	0	0	0
Wyoming	0	0	0	-------	0	1	0	4	3	0	0	0
Colorado	4	14	4	27	11	5	0	14	14	0	0	0
New Mexico	5	1	1	-------	2	-------	2	4	4	0	0	0
Arizona	0	0	0	12	35	30	2	4	4	0	0	0
Utah	0	0	0	-------	1	1	7	2	4	0	0	0
Nevada	0	0	0	1	0	0	4	0	0	0	1	0
PACIFIC												
Washington	5	1	1	1	1	-------	32	17	17	3	5	0
Oregon	0	6	1	5	2	3	18	12	12	1	5	1
California	15	18	10	28	10	11	150	54	54	12	14	0
Total	205	198	243	491	565	388	668	808	666	123	151	29
35 weeks	7,189	7,696	8,074	339,669	82,813	152,280	592,322	539,146	467,858	13,371	13,845	1,470

[1] New York City only.

[2] Period ended earlier than Saturday.

Telegraphic morbidity reports from State health officers for the week ended Sept. 2, 1944, and comparison with corresponding week of 1943 and 5-year median—Con.

Division and State	Poliomyelitis			Scarlet fever			Smallpox			Typhoid and paratyphoid fever [3]		
	Week ended—		Median 1939–43	Week ended—		Median 1939–43	Week ended—		Median 1939–43	Week ended—		Median 1939–43
	Sept. 2, 1944	Sept. 4, 1943		Sept. 2, 1944	Sept. 4, 1943		Sept. 2, 1944	Sept. 4, 1943		Sept. 2, 1944	Sept. 4, 1943	
NEW ENGLAND												
Maine	1	1	1	10	13	1	0	0	0	0	1	2
New Hampshire	11	1	0	0	2	2	0	0	0	0	1	0
Vermont	7	0	0	0	1	1	0	0	0	1	0	0
Massachusetts	35	20	3	32	47	47	0	0	0	2	2	4
Rhode Island	1	11	1	2	4	3	0	0	0	1	0	0
Connecticut	20	44	5	10	8	7	0	0	0	2	1	4
MIDDLE ATLANTIC												
New York	666	58	58	56	66	52	0	0	0	16	13	12
New Jersey	67	9	10	15	14	19	0	0	0	3	5	4
Pennsylvania	162	5	13	34	41	42	0	0	0	3	18	18
EAST NORTH CENTRAL												
Ohio	105	18	18	50	66	46	0	1	0	13	14	12
Indiana	27	3	6	11	11	11	0	0	0	4	1	6
Illinois	37	192	31	18	53	53	0	6	1	3	6	10
Michigan [2]	120	18	26	26	42	41	0	0	0	2	6	9
Wisconsin	32	18	7	27	35	35	0	0	0	2	1	1
WEST NORTH CENTRAL												
Minnesota	40	11	11	11	22	15	0	0	0	0	0	0
Iowa	7	33	2	6	13	13	0	0	0	1	2	3
Missouri	11	30	5	11	8	11	0	0	0	11	3	9
North Dakota	4	2	1	2	2	2	0	0	0	1	0	0
South Dakota	0	0	1	0	11	9	0	0	0	1	0	0
Nebraska	7	17	2	7	3	3	0	0	0	0	0	1
Kansas	8	90	5	23	18	20	0	0	0	5	5	4
SOUTH ATLANTIC												
Delaware	4	3	0	2	1	1	0	0	0	0	0	1
Maryland [2]	47	0	1	14	11	9	0	0	0	2	0	5
District of Columbia	22	0	0	2	2	4	0	0	0	0	3	2
Virginia	65	0	1	11	8	5	0	0	0	5	2	6
West Virginia	11	0	2	36	27	11	0	0	0	4	1	9
North Carolina	42	3	3	27	56	23	0	0	0	7	1	11
South Carolina	4	1	1	2	9	4	0	0	0	2	4	6
Georgia	8	1	2	6	12	12	2	0	0	6	8	18
Florida	2	0	3	1	1	2	0	0	0	2	0	3
EAST SOUTH CENTRAL												
Kentucky	34	10	10	13	14	17	0	0	0	7	8	16
Tennessee	5	2	4	9	23	10	0	0	0	1	7	15
Alabama	2	0	3	6	21	20	0	0	0	1	5	6
Mississippi [3]	7	2	2	7	6	6	0	0	0	3	11	11
WEST SOUTH CENTRAL												
Arkansas	3	1	2	3	3	4	0	0	0	9	7	9
Louisiana	1	1	1	1	0	2	0	0	0	1	4	13
Oklahoma	2	17	2	3	5	8	0	0	0	3	5	13
Texas	8	62	8	20	17	18	0	0	0	17	11	26
MOUNTAIN												
Montana	0	9	3	4	11	9	0	0	0	0	0	2
Idaho	1	0	1	3	2	2	0	0	0	0	1	1
Wyoming	0	5	0	0	6	1	0	0	0	0	0	1
Colorado	5	20	1	10	10	7	0	0	0	0	2	2
New Mexico	1	12	2	3	4	1	0	0	0	2	0	4
Arizona	1	1	2	1	2	1	0	0	0	3	3	2
Utah [2]	2	76	3	4	9	2	0	0	0	0	0	1
Nevada	2	0	0	0	2	0	0	0	0	0	0	0
PACIFIC												
Washington	12	19	2	21	14	8	0	0	0	0	5	3
Oregon	11	16	3	7	7	6	0	0	1	2	1	1
California	10	114	13	87	58	39	0	0	0	1	1	7
Total	1,682	956	606	654	821	683	2	7	7	149	169	345
35 weeks	9,474	5,886	3,301	148,893	99,317	99,317	305	616	1,192	3,596	3,655	5,181

[2] Period ended earlier than Saturday.

[3] Including paratyphoid fever reported separately, as follows: Massachusetts 1, Rhode Island 1, Connecticut 2, New York 6, Illinois 1, Georgia 1, Arkansas 2, Texas 2.

Telegraphic morbidity reports from State health officers for the week ended Sept. 2, 1944, and comparison with corresponding week of 1943 and 5-year median—Con.

Division and State	Whooping cough			Week ended September 2, 1944								
	Week ended—		Median 1939–43	Anthrax	Dysentery			Encephalitis, infectious	Leprosy	Rocky Mt. spotted fever	Tularemia	Typhus fever
	Sept. 2, 1944	Sept. 4, 1943			Amebic	Bacillary	Unspecified					
NEW ENGLAND												
Maine	20	16	19	0	0	0	0	0	0	0	0	0
New Hampshire	0	0	0	0	0	0	0	0	0	0	0	0
Vermont	9	23	23	0	0	0	0	0	0	0	0	0
Massachusetts	69	37	110	0	0	4	0	0	0	0	0	0
Rhode Island	6	6	10	0	0	0	0	0	0	0	0	0
Connecticut	30	7	38	0	0	4	0	0	0	0	0	0
MIDDLE ATLANTIC												
New York	183	258	264	0	3	73	0	5	0	1	0	1
New Jersey	61	127	96	1	0	3	0	1	0	0	0	0
Pennsylvania	79	133	192	0	0	0	0	0	0	0	0	0
EAST NORTH CENTRAL												
Ohio	119	123	209	0	0	0	0	0	0	0	0	0
Indiana	2	27	27	0	0	0	0	0	0	1	1	0
Illinois	68	156	201	0	0	5	0	2	0	0	0	0
Michigan [3]	61	221	221	0	2	7	0	0	0	0	0	0
Wisconsin	120	208	208	0	0	0	0	0	0	0	0	0
WEST NORTH CENTRAL												
Minnesota	41	50	35	0	3	0	0	2	0	0	0	0
Iowa	10	72	23	0	0	0	0	0	0	0	0	0
Missouri	16	13	8	0	0	0	1	0	0	0	2	0
North Dakota	39	42	13	0	0	0	0	17	0	0	0	0
South Dakota	4	12	6	0	0	0	0	0	0	0	0	0
Nebraska	3	9	3	0	0	0	0	0	0	0	0	0
Kansas	38	31	32	0	0	0	0	1	0	0	1	0
SOUTH ATLANTIC												
Delaware	0	7	4	0	0	0	0	0	0	0	0	0
Maryland [3]	46	55	56	0	0	0	8	0	0	1	0	0
District of Columbia	0	24	15	0	0	0	0	0	0	0	0	0
Virginia	23	23	22	0	0	0	150	0	0	3	0	1
West Virginia	12	57	17	0	0	0	0	0	0	0	0	0
North Carolina	95	100	100	0	0	0	0	0	0	2	1	7
South Carolina	70	58	18	0	0	8	0	0	0	0	0	5
Georgia	2	13	17	0	0	6	0	0	0	0	1	25
Florida	19	19	11	0	0	0	0	0	0	0	0	19
EAST SOUTH CENTRAL												
Kentucky	34	23	27	0	0	0	0	0	0	0	0	0
Tennessee	15	27	27	0	0	0	9	0	0	0	0	1
Alabama	6	18	18	0	0	0	0	0	0	0	0	17
Mississippi [3]				0	0	0	0	0	0	0	0	7
WEST SOUTH CENTRAL												
Arkansas	8	14	13	0	1	70	0	0	0	0	0	0
Louisiana	1	6	6	0	0	0	0	0	0	0	0	7
Oklahoma	7	2	4	0	0	0	8	0	0	0	0	0
Texas	170	139	139	0	21	426	16	3	0	0	1	65
MOUNTAIN												
Montana	21	17	17	0	0	0	0	1	0	0	0	0
Idaho	1	0	1	0	0	0	0	1	0	0	0	0
Wyoming	1	1	3	0	0	0	0	0	0	0	2	0
Colorado	34	32	20	0	1	0	0	5	0	0	0	0
New Mexico	0	9	8	0	0	3	2	0	0	0	0	0
Arizona	26	13	7	0	0	0	33	0	0	0	0	0
Utah [3]	24	60	39	0	0	0	0	0	0	0	1	0
Nevada	0	2	0	0	0	0	0	0	0	0	1	0
PACIFIC												
Washington	19	64	36	0	0	0	0	0	0	0	0	0
Oregon	4	46	19	0	0	0	0	0	0	0	0	0
California	74	135	135	0	8	8	0	3	0	0	0	2
Total	1,690	2,536	2,536	1	39	617	218	41	0	8	11	157
Same week 1943	2,536			2	30	447	252	25	1	16	6	128
Same week 1942	2,894			2	32	217	161	21	0	10	8	126
35 Weeks 1944	66,648			31	1,179	15,160	5,640	442	20	389	397	3,091
35 Weeks 1943	137,429			44	1,435	11,096	5,230	475	19	381	615	2,469
35 Weeks 1942	128,043		[4] 131,769	60	772	6,059	4,700	361	35	[4] 399	676	[4] 1,734

[3] Period ended earlier than Saturday.

[4] 5-year median.

WEEKLY REPORTS FROM CITIES

City reports for week ended August 19, 1944

This table lists the reports from 87 cities of more than 10,000 population distributed throughout the United States, and represents a cross section of the current urban incidence of the diseases included in the table.

	Diphtheria cases	Encephalitis, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Poliomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
NEW ENGLAND												
Maine:												
Portland	0	0	-----	0	0	0	0	0	0	0	0	0
New Hampshire:												
Concord	0	0	-----	0	1	0	2	0	0	0	0	0
Massachusetts:												
Boston	1	0	-----	0	26	6	9	3	13	0	0	6
Fall River	0	0	-----	0	0	0	0	0	0	0	0	5
Springfield	0	0	1	1	3	3	2	2	1	0	0	0
Worcester	0	0	-----	0	0	0	2	0	5	0	1	1
Rhode Island:												
Providence	0	0	-----	0	0	0	1	0	1	0	0	
Connecticut:												
Bridgeport	0	0	-----	0	0	0	2	3	0	0	0	3
Hartford	0	0	-----	0	0	0	0	1	1	0	0	4
New Haven	0	0	1	0	0	0	0	1	0	0	0	5
MIDDLE ATLANTIC												
New York:												
Buffalo	0	0	-----	0	0	1	3	79	1	0	2	0
New York	4	0	2	3	15	16	66	129	18	0	13	59
Rochester	0	0	-----	0	6	1	0	8	0	0	0	5
Syracuse	0	0	-----	0	1	2	0	11	0	0	0	12
New Jersey:												
Camden	0	0	-----	0	1	0	0	0	1	0	0	0
Newark	0	0	1	0	5	0	1	6	0	0	0	7
Trenton	0	0	-----	0	0	0	4	0	0	0	0	0
Pennsylvania:												
Philadelphia	1	0	3	2	3	2	11	31	8	0	1	8
Pittsburgh	0	0	-----	0	0	6	5	10	3	0	0	5
Reading	0	0	-----	0	0	0	0	0	0	0	0	0
EAST NORTH CENTRAL												
Ohio:												
Cincinnati	2	0	-----	0	0	2	2	7	8	0	0	10
Cleveland	1	0	-----	0	0	2	4	25	2	0	0	35
Columbus	0	0	-----	0	3	0	1	0	2	0	0	17
Indiana:												
Fort Wayne	0	0	-----	0	0	0	1	1	1	0	0	0
Indianapolis	1	0	-----	0	1	1	2	2	2	0	0	4
South Bend	0	0	-----	0	0	0	0	0	0	0	0	0
Terre Haute	0	0	-----	0	0	0	0	0	0	0	0	0
Illinois:												
Chicago	1	0	1	1	9	3	24	12	10	0	2	47
Springfield	0	0	-----	0	0	0	2	0	3	0	0	0
Michigan:												
Detroit	3	0	1	0	8	0	11	33	5	0	1	38
Flint	0	0	-----	0	0	0	6	1	0	0	0	4
Grand Rapids	0	0	-----	0	0	0	1	0	0	0	1	6
Wisconsin:												
Kenosha	1	0	-----	0	0	0	0	0	0	0	0	11
Milwaukee	0	0	-----	0	12	1	0	3	1	0	0	31
Racine	0	0	-----	0	5	0	1	0	0	0	0	6
Superior	0	0	-----	0	5	0	0	0	1	0	0	0
WEST NORTH CENTRAL												
Minnesota:												
Duluth	0	0	-----	0	0	0	1	6	0	0	0	9
Minneapolis	1	0	-----	0	0	0	2	11	2	0	0	3
St. Paul	1	0	-----	0	1	1	2	8	0	0	0	26
Missouri:												
Kansas City	0	0	-----	0	1	1	4	1	1	0	1	0
St. Joseph	0	0	-----	0	0	0	0	0	2	0	0	0
St. Louis	1	0	1	1	18	3	8	3	1	0	0	12

City reports for week ended August 19, 1944—Continued

	Diphtheria cases	Encephalitis, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Poliomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
WEST NORTH CENTRAL—continued												
North Dakota:												
Fargo	0	0	-----	0	0	0	1	4	0	0	0	0
Kansas:												
Topeka	0	0	-----	0	0	0	0	0	0	0	0	8
Wichita	0	0	-----	0	0	0	4	0	0	0	0	1
SOUTH ATLANTIC												
Delaware:												
Wilmington	0	0	-----	0	0	0	1	4	0	0	0	1
Maryland:												
Baltimore	4	0	-----	0	1	2	10	14	6	0	0	54
Cumberland	0	0	-----	0	0	0	0	0	0	0	0	0
Frederick	0	0	-----	0	0	0	0	0	0	0	0	0
District of Columbia:												
Washington	0	0	-----	0	4	0	6	19	4	0	0	7
Virginia:												
Lynchburg	0	0	-----	0	0	0	0	13	1	0	0	1
Richmond	0	0	-----	0	2	0	0	1	1	0	0	2
Roanoke	0	0	-----	0	0	0	0	5	0	0	0	2
West Virginia:												
Charleston	0	0	-----	0	0	0	0	0	1	0	0	0
Wheeling	0	0	-----	0	1	0	2	1	1	0	0	5
North Carolina:												
Raleigh	0	0	-----	0	0	0	0	2	0	0	0	4
Wilmington	0	0	-----	0	0	0	3	0	1	-----	-----	13
Winston-Salem	0	0	-----	0	0	0	0	3	0	0	0	7
South Carolina:												
Charleston	0	0	-----	0	0	0	1	0	0	0	1	0
Georgia:												
Atlanta	0	0	5	0	2	1	3	0	2	0	1	3
Brunswick	0	0	-----	0	0	0	0	0	0	0	0	0
Savannah	0	0	-----	0	0	0	1	0	0	0	1	0
EAST SOUTH CENTRAL												
Tennessee:												
Memphis	0	0	-----	0	1	0	8	1	0	0	1	14
Nashville	0	0	-----	0	4	0	3	0	0	0	0	0
Alabama:												
Birmingham	1	0	1	0	0	1	2	2	1	0	0	0
Mobile	0	0	-----	0	1	0	2	0	0	0	0	0
WEST SOUTH CENTRAL												
Arkansas:												
Little Rock	0	0	-----	0	0	0	0	0	0	0	0	9
Louisiana:												
New Orleans	0	0	1	0	0	0	5	4	0	0	0	0
Shreveport	0	0	-----	0	0	0	5	0	0	0	1	0
Texas:												
Dallas	1	0	-----	0	1	0	1	0	1	0	0	8
Galveston	0	0	-----	0	0	0	0	0	0	0	0	0
Houston	2	0	-----	0	0	0	3	0	1	0	6	1
San Antonio	1	0	1	0	0	0	2	0	0	0	1	1
MOUNTAIN												
Montana:												
Billings	0	0	-----	0	0	0	1	0	0	0	0	3
Great Falls	0	0	-----	0	0	0	1	0	0	0	0	0
Helena	0	0	-----	0	0	0	0	0	0	0	0	3
Missoula	0	0	-----	0	0	0	0	0	0	0	0	0
Idaho:												
Boise	0	0	-----	0	0	0	0	0	0	0	0	0
Colorado:												
Denver	1	0	-----	0	0	1	7	1	3	0	0	16
Pueblo	0	0	-----	0	0	0	3	0	0	0	0	0
Utah:												
Salt Lake City	0	0	-----	0	6	0	1	0	2	0	0	3

City reports for week ended August 19, 1944—Continued

	Diphtheria cases	Encephalitis, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Poliomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
PACIFIC												
Washington:												
Seattle	0	0	------	0	2	0	3	5	1	0	0	0
Spokane	0	0	------	0	0	0	0	1	2	0	0	0
Tacoma	0	0	------	0	4	0	2	2	0	0	0	4
California:												
Los Angeles	5	0	3	0	15	4	0	2	5	0	0	5
Sacramento	1	2	------	0	7	0	3	0	3	0	0	3
San Francisco	0	0	------	0	24	1	4	0	8	0	0	0
Total	34	3	21	8	199	61	268	481	137	0	34	562
Corresponding week, 1943	38	------	21	5	367	------	222	------	285	0	34	1033
Average, 1939–43	44	------	27	[1] 8	[2] 270	------	[1] 216	------	188	1	43	1123

[1] 3 year average, 1941–43.
[2] 5 year median.

Anthrax.—Cases: Houston, 1.
Dysentery, amebic.—Cases: Boston, 1; Chicago, 1; Houston, 1.
Dysentery, bacillary.—Cases: Providence, 3; New Haven, 2; New York, 1; Syracuse, 2; Philadelphia, 1; Pittsburgh, 1; Chicago, 1; Detroit, 6; Baltimore, 1; Richmond, 1; Charleston, S. C., 1; Memphis, 1; Nashville, 2; Los Angeles, 6.
Dysentery, unspecified.—Cases: Cleveland, 1; Baltimore, 1; Richmond, 3; Sacramento, 2.
Leprosy.—Cases: New Orleans 2.
Rocky Mountain spotted fever.—Cases: St. Louis, 1; Richmond, 1.
Tularemia.—Cases: Richmond, 1.
Typhus fever, endemic.—Cases: Atlanta, 2; Savannah, 12; Nashville, 5; Birmingham, 4; Mobile, 10; New Orleans, 10; Houston, 11; San Antonio, 9; Wilmington, N. C. 10.

Rates (annual basis) per 100,000 population, by geographic groups, for the 87 cities in the preceding table (estimated population, 1943, 34,052,500)

	Diphtheria case rates	Encephalitis, infectious, case rates	Influenza		Measles case rates	Meningitis, meningococcus, case rates	Pneumonia death rates	Poliomyelitis case rates	Scarlet fever case rates	Smallpox case rates	Typhoid and paratyphoid fever case rates	Whooping cough case rates
			Case rates	Death rates								
New England	2.6	2.6	2.6	2.6	79	23.6	47.3	26.3	55	0.0	2.6	76
Middle Atlantic	2.3	0.0	2.8	2.3	14	13.0	41.7	126.8	14	0.0	7.4	44
East North Central	5.5	0.0	1.2	0.6	26	5.5	33.4	51.1	21	0.0	2.4	127
West North Central	6.5	0.0	2.2	2.2	43	10.8	47.7	71.5	13	0.0	2.2	128
South Atlantic	6.8	0.0	8.5	0.0	17	5.1	45.8	105.2	29	0.0	5.1	168
East South Central	6.0	0.0	6.0	0.0	35	6.0	88.5	17.7	6	0.0	6.0	83
West South Central	11.5	0.0	5.7	0.0	3	0.0	45.9	11.5	6	0.0	23.0	55
Mountain	7.9	0.0	0.0	0.0	48	7.9	103.3	7.9	40	0.0	0.0	199
Pacific	9.5	3.2	4.8	0.0	82	7.9	19.0	15.8	30	0.0	0.0	19
Total	5.2	0.5	3.2	1.2	31	9.4	41.1	73.9	21	0.0	5.2	86

TERRITORIES AND POSSESSIONS

Hawaii Territory

Plague (rodent).—Two rats found in Honokaa, Hamakua District, Island of Hawaii, T. H., have been proved positive for plague on July 11, 1944 and August 2, 1944, respectively. One mouse found in the same place was proved positive for plague on July 18, 1944.

FOREIGN REPORTS

CANADA

Provinces—Communicable diseases—Week ended August 5, 1944.—During the week ended August 5, 1944, cases of certain communicable diseases were reported by the Dominion Bureau of Statistics of Canada as follows:

Disease	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
Chickenpox		11	1	6	64	11	10	24	20	147
Diphtheria		8	4	16	2	1	1	17		49
Dysentery (bacillary)				2						2
German measles				3	16		2	4	14	39
Influenza					3				3	6
Measles		5	1	53	70	18	16	60	9	232
Meningitis, meningococcus				3	3				1	7
Mumps				35	26	7	10	27	5	110
Poliomyelitis			4	2	[1] 12	2	1	7		[1] 28
Scarlet fever		3	5	16	38	17	8	28	6	121
Tuberculosis (all forms)		1	11	141	54	10			24	241
Typhoid and paratyphoid fever				3	6		1			10
Undulant fever				4	1				1	6
Whooping cough		21		69	39	8	3	8	25	173

[1] Includes 3 cases in delayed reports.

REPORTS OF CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER RECEIVED DURING THE CURRENT WEEK

NOTE.—Except in cases of unusual incidence, only those places are included which had not previously reported any of the above-mentioned diseases, except yellow fever, during the current year. All reports of yellow fever are published currently.

A table showing the accumulated figures for these diseases for the year to date is published in the PUBLIC HEALTH REPORTS for the last Friday in each month.

(Few reports are available from the invaded countries of Europe and other nations in war zones.)

Cholera

India—Bihar Province.—Information dated August 10, 1944, states that according to newspaper reports a serious outbreak of cholera has appeared in Bihar Province, India. No reliable statistics are available.

Plague

Egypt—Port Said.—For the week ended August 12, 1944, 5 cases of plague with 2 deaths were reported in Port Said, Egypt.

French West Africa—Dakar.—For the period August 1–7, 1944, 38 cases of plague with 27 deaths were reported in Dakar, French West Africa.

Senegal.—For the period July 11–20, 1944, 8 deaths from plague were reported in Senegal.

Smallpox

Brazil—Sao Paulo State—Santos.—Smallpox has been reported in Santos, Sao Paulo State, Brazil, as follows: Weeks ended—July 1, 1944, 7 cases, July 8, 9 cases, July 15, 2 cases, July 22, 23 cases, July 29, 58 cases, August 5, 32 cases, August 12, 19 cases.

British East Africa.—For the week ended July 22, 1944, smallpox was reported in British East Africa, as follows: Tanganyika Territory, 305 cases; Uganda, 116 cases, 1 death.

Nigeria.—For the week ended July 22, 1944, 113 cases of smallpox with 15 deaths were reported in Nigeria.

Peru.—For the month of June 1944, 25 cases of smallpox were reported in Peru, including 11 cases in Huancavelica Department and 5 cases in Puno Department.

Venezuela.—For the month of July 1944, 41 cases of smallpox with 2 deaths were reported in Venezuela including 37 cases with 2 deaths reported in Caracas. For the week ended August 19, 1944, 7 cases of smallpox were reported in Falcon State and 7 cases in Miranda State, Venezuela.

Typhus Fever

Chile.—For the 4 weeks ended July 15, 1944, 90 cases of typhus fever with 12 deaths were reported in Chile, including 63 cases with 11 deaths reported in Chiloe Province, 2 cases in Antofagasta, 8 cases in Santiago, 9 cases in Talcahuano, and 5 cases in Valparaiso.

Colombia.—Typhus fever has been reported in Sonson, Antioquia Department, Colombia, by months, as follows: January 1944, 7 cases, 1 death; February, 21 cases, 1 death; March, 54 cases, 2 deaths; April, 70 cases, 4 deaths; May, 72 cases, 1 death; June, 26 cases, 1 death; July, 7 cases.

Egypt.—For the week ended July 22, 1944, 172 cases of typhus fever with 34 deaths were reported in Egypt.

Guatemala.—For the month of July 1944, 175 cases of typhus fever with 17 deaths were reported in Guatemala, including 21 cases in El Quiche Department, 40 cases in Alta Verapaz Department, 29 cases with 5 deaths in Quezaltenango Department, and 27 cases with 4 deaths in San Marcos Department.

Hungary.—For the week ended July 29, 1944, 56 cases of typhus fever (22 in Subcarpathia) were reported in Hungary.

Peru.—For the month of June 1944, 170 cases of typhus fever were reported in Peru, including 30 cases in Ancash Department, 18 cases in Cuzco Department, and 27 cases in Huanuco Department.

Rumania.—For the period April 24–30, 1944, 381 cases of typhus

fever were reported in Rumania; for the period May 1–7, 1944, 441 cases were reported.

Venezuela.—For the month of July 1944, 11 cases of typhus fever were reported in Venezuela.

Yugoslavia.—For the period July 1–14, 1944, 348 cases of typhus fever (43 cases in Brod, 99 cases in Travnik, and 99 cases in Tuzia) were reported in Yugoslavia.

Yellow Fever

Belgian Congo—Coquilhatville Province—Banzyville.—On June 26, 1944, 1 death from yellow fever was reported in Banzyville, Coquilhatville Province, Belgian Congo. For the period August 12–17, 1944, 10 cases of suspected yellow fever were reported in the same locality.

* * *

INCIDENCE OF HOSPITALIZATION, JULY 1944

Through the cooperation of the Hospital Service Plan Commission of the American Hospital Association, data on hospital admissions among about 10,000,000 members of Blue Cross Hospital Service Plans are presented monthly. These plans provide prepaid hospital service. The data cover about 60 hospital service plans scattered throughout the country, mostly in large cities.

Item	July	
	1943	1944
1. Number of plans supplying data	72	73
2. Number of persons eligible for hospital care	11,076,738	13,664,738
3. Number of persons admitted for hospital care	107,693	129,769
4. Incidence per 1,000 persons, annual rate, during current month (daily rate × 365)	114.4	112.2
5. Incidence per 1,000 persons, annual rate for the 12 months ended July 31	105.5	104.8

DEATHS DURING WEEK ENDED AUGUST 26, 1944

[From the Weekly Mortality Index, issued by the Bureau of the Census, Department of Commerce]

	Week ended Aug. 26, 1944	Corresponding week, 1943
Data for 93 large cities of the United States:		
Total deaths	7,472	7,856
Average for 3 prior years	7,509	
Total deaths, first 34 weeks of year	312,399	318,561
Deaths under 1 year of age	601	657
Average for 3 prior years	610	
Deaths under 1 year of age, first 34 weeks of year	21,073	22,876
Data from industrial insurance companies:		
Policies in force	66,705,582	65,764,051
Number of death claims	12,097	10,974
Death claims per 1,000 policies in force, annual rate	9.5	8.7
Death claims per 1,000 policies, first 34 weeks of year, annual rate	10.2	10.0

FEDERAL SECURITY AGENCY

UNITED STATES PUBLIC HEALTH SERVICE

THOMAS PARRAN, *Surgeon General*

DIVISION OF PUBLIC HEALTH METHODS

G. ST. J. PERROTT, *Chief o Division*

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It contains (1) current information regarding the prevalence and geographic distribution of communicable diseases in the United States, insofar as data are obtainable, and of cholera, plague, smallpox, typhus fever, yellow fever, and other important communicable diseases throughout the world; (2) articles relating to the cause, prevention, and control of disease; (3) other pertinent information regarding sanitation and the conservation of the public health.

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